

- (b) a modification list for storing identified changes to the master source file set;
- (c) a transmitter for transmitting the modification list to an agent in communication with the computer, the agent having access to a destination file system; and
- (d) a receiver for receiving a response from the computer indicating that the destination file system received the identified changes.

25. (Amended) The content distributor of claim 24, wherein the transmitter is also for transmitting a copy of a changed file of the master source file set to the agent for installation on the destination file system.

### REMARKS

#### Claim Cancellations, Additions, and Status

Claims 1-25 were pending in this application. Applicants hereby cancel claims 3, 14, 16, 17, and 18, without prejudice to their right to pursue the subject matter of any of these claims in this or a related application. Upon entry of this Amendment and Response, there are 20 claims pending, claims 1, 2, 4-13, 15, and 19-25. Claims 1, 19, and 24 are independent claims, and claims 2, 4-13, 15, 20-23, and 25 are dependent claims.

#### Claim Rejections

Claims 1-25 are rejected under 35 U.S.C. § 102(b) over United States Patent No. 5,812,793 to *Shakib et al.* ("Shakib"). Claims 9-13 are rejected under 35 U.S.C. § 112, first paragraph. Applicants respectfully traverse these rejections.

#### Claim Rejections Under 35 U.S.C. § 112, First Paragraph

Applicants hereby amend claims 9-11 to address the Examiner's concerns. Applicants also submit that the originally-filed application contains enabling disclosure for the currently-pending claims and for the originally-submitted claims at, for example, page 25, lines 23-30 and

in FIG. 12. Applicants respectfully request reconsideration and withdrawal of the rejections of claims 9-13.

Shakib

Shakib discloses the use of one-way, unacknowledged communication messages between systems in a computer network to transfer locally modified data to other systems having a copy of the data. See Abstract. Shakib describes the use of the messages at column 4, lines 23-38, as follows:

In a store and forward replication process, each server keeps track of locally made changes to a particular copy of a replication data set (sometimes referred to as a "replica") which contains one or more data objects. Each server periodically broadcasts the new locally made changes (e.g., creation of new data, modification of existing data, or deletion of existing data since the last replication interval) to all other servers with a copy of the same replication data set. The group of other servers also having copies of the data set is kept on a "replica list." The changes are preferably broadcast in the form of an updated copy of the changed data objects. This allows each server to update the local replica as changes are received by replacing the older versions of the data objects with the newer versions of the data objects.

The above-described messages are communicated by physical network connections capable of delivering one-way, unacknowledged communications message. See col. 7, lines 35-36. As defined in Shakib, one-way, unacknowledged communication means that the store and forward replication process delivers a message and does not receive feedback as to the success of the transfer. See column 7, lines 37-40. According to Shakib, this feature provides a substantial benefit over other replication systems and methods. See column 7, lines 44-46.

Claim Rejections Under 35 U.S.C. § 102(b)

Applicants' independent claims 1, 19, and 24 recite, in part, "... receiving a response ..." indicating that changes to a master source file set have been received by or installed on a destination file system. Support for this is found in Applicants' originally-filed specification at, for example, page 19, lines 20-21, which states that "[w]hen the update is successful, the agents inform the content distributor that they succeeded in updating the files."

Shakib fails to teach or suggest "receiving a response" as now claimed. In contrast, Shakib specifically states that after delivery of the locally made changes the node does not receive feedback as to the success of the transfer. In the words of Shakib, the transfer of the changes is "one way, unacknowledged." Therefore, Shakib fails to teach or suggest amended independent claims 1, 19, and 24 and the claims which depend directly or indirectly from them.

Furthermore, amended claim 1 recites, in part, "identifying changes in a master source file set ...." Amended claim 19 recites, in part, "... providing notification of changes to a master source file set ...." Amended claim 24 recites, in part, "a modification list for storing identified changes to the master source file set ...." Support for the term "master" can be found in Applicants' originally-filed specification, for example, at page 12, lines 12-13, which states that the "source files are the 'master' copy of the content for the web servers."

In contrast to Shakib, each of Applicants' independent claims recites the use of a "master" source file set. Shakib does not use a master source file set. Instead, Shakib tracks local changes to a replication data set residing on a server. Each sever periodically broadcasts the local changes to each other server having the same replication data set. Therefore, no master source file set exists in Shakib. As such, Shakib fails to teach or suggest amended independent claims 1, 19, and 24 and the claims which depend directly or indirectly from them.

Conclusion

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of all rejections, and allowance of all claims (i.e., 1, 2, 4-13, 15, and 19-25), in due course. If the Examiner believes that a telephone conference with Applicants' attorney would be helpful, the Examiner is invited to contact the Applicants' attorney at the number below.

Respectfully submitted,



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CLEAN COPY OF PENDING CLAIMS

1. (Amended) A method for replicating changes in a master source file set on a destination file system located on a host, the destination file system for access by a web server, the method comprising the steps of:
  - (a) identifying changes in the master source file set;
  - (b) storing the identified changes in a modification list;
  - (c) transmitting the modification list to at least one web server in communication with an agent, the agent having access to the destination file system, the destination file system, the agent and the at least one web server running on the same host, thereby notifying the at least one web server that the master source file set has changed; and
  - (d) receiving a response from the at least one web server indicating that the destination file system installed the identified changes.
2. (Amended) The method of claim 1 further comprising the step of:
  - (e) transmitting a copy of a changed file of the master source file set to the agent.
3. (Cancelled)
4. (Amended) The method of claim 1 wherein the identifying step comprises the steps of:
  - inspecting a current version of the master source file set; and
  - comparing the current version to a previous version of the master source file set.
5. (Amended) The method of claim 1 wherein the identifying step comprises the steps of:
  - installing a device driver to perform file operations and monitor changes to the master source file set; and
  - recording, by the device driver, changes to the master source file set.
6. (Amended) The method of claim 1 wherein the identifying step comprises:
  - receiving a manifest describing changes to the master source file set.
7. (Amended) The method of claim 4 wherein the comparing step comprises comparing a file attribute of a file of the current version of the master source file set to a file attribute of a file of

the previous version of the master source file set.

8. (Amended) The method of claim 7 wherein the file attribute comprises at least one attribute chosen from the group consisting of file size, file permissions, file ownership, modification time, and a hash of the file.

9. (Amended) The method of claim 1, further comprising, before the identifying step, the step of calling a script of user configurable instructions by calling an operating system function.

10. (Amended) The method of claim 1, further comprising, before the transmitting step, the step of calling a script of user configurable instructions by calling an operating system function.

11. (Amended) The method of claim 1, further comprising, after the transmitting step, the step of calling a script of user configurable instructions by calling an operating system function.

12. The method of claim 11, further comprising the step of determining whether the transmitting step has successfully completed, and wherein the calling step occurs after the determining step.

13. The method of claim 11, wherein the step of calling a script occurs after the success of the transmission is known.

14. (Cancelled)

15. (Amended) The method of claim 1 wherein the transmitting step comprises multicasting.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Amended) A web service system, comprising:  
a manager for managing the web service system;

a host comprising a web server for receiving web page requests and an agent in communication with the manager and the web server; and

a content distributor in communication with the host and the manager, the content distributor providing notification of changes to a master source file set to the host and for receiving a response indicating that the identified changes are installed.

20. (Amended) The system of claim 19, further comprising a traffic manager in communication with the manager, the traffic manager directing web page requests to the web server.

21. (Amended) The system of claim 19, wherein the content distributor comprises:

- (a) an identification module for identifying changes in the master source file set;
- (b) a modification list for storing identified changes to the master source file set;
- (c) a transmitter for transmitting the modification list to the agent, the agent having access to a destination file system; and
- (d) a receiver for receiving a response indicating that the destination file system received the identified changes.

22. (Amended) The system of claim 21, further comprising a transmitter for transmitting a copy of a changed file of the master source file set to the agent.

23. (Amended) The system of claim 21, wherein the agent comprises an installer for installing a copy of a changed file of the master source file set on the destination file system.

24. (Amended) A content distributor in communication with a computer, comprising:

- (a) an identification module for identifying changes in a master source file set;
- (b) a modification list for storing identified changes to the master source file set;
- (c) a transmitter for transmitting the modification list to an agent in communication with the computer, the agent having access to a destination file system; and
- (d) a receiver for receiving a response from the computer indicating that the destination file system received the identified changes.

25. (Amended) The content distributor of claim 24, wherein the transmitter is also for

Amendment and Response  
U.S. Serial No.: 09/377,611  
Page 1 of 14

transmitting a copy of a changed file of the master source file set to the agent for installation on the destination file system.



MARKED-UP COPY OF AMENDMENTS TO THE CLAIMS

1. (Amended) A method for replicating changes in a master source file set on a destination file system located on a host, the destination file system for access by a web server, the method comprising the steps of:

(a) identifying changes in [a]the master source file set;

(b) storing the identified changes in a modification list; [and]

(c) transmitting the modification list to at least one web server in communication with an agent having access to [a]the destination file system, the destination file system, the agent and the at least one web server running on the host, thereby notifying the at least one web server that the master source file set has changed; and

(d) receiving a response from the at least one web server indicating that the destination file system installed the identified changes.

2. (Amended) The method of claim 1 further comprising the step of:

[(d)](e) transmitting [the changed files]a copy of a changed file of the master source file set to the agent [having access to the destination file system].

4. (Amended) The method of claim 1 wherein the identifying step comprises the steps of:

inspecting a current version[set] of the master source file[s] set; and

comparing the [set of files ]current version to a[n earlier-recorded]previous version of the master source file set.

5. (Amended) The method of claim 1 wherein the identifying step comprises the steps of:

installing a device driver to perform file operations and monitor changes to the master source file set; and

recording, by the device driver, changes to the master source file set.

6. (Amended) The method of claim 1 wherein the identifying step comprises:

receiving a manifest describing changes to the master source file set.

7. (Amended) The method of claim 4 wherein the comparing step comprises comparing a file attribute of a file of the current version of the master source file set to a[the] file attribute of [the earlier-recorded] a file of the previous version of a file set.

8. (Amended) The method of claim 7 wherein the file attribute comprises at least one attribute chosen from the [set]group consisting of file size, file permissions, file ownership, modification time, and a hash of the file.

9. (Amended) The method of claim 1, further comprising, before the identifying step, the step of calling a script of user configurable instructions by calling an operating system function.

10. (Amended) The method of claim 1, further comprising, before the transmitting step, the step of calling a script of user configurable instructions by calling an operating system function.

11. (Amended) The method of claim 1, further comprising, after the transmitting step, the step of calling a script of user configurable instructions by calling an operating system function.

15. (Amended) The method of claim 1[4] wherein the transmitting step comprises multicasting.

19. (Amended) A web service system, comprising:

a manager for managing the web service system;

a host comprising a web server for receiving web page requests and an agent in communication with the manager and the web server; and

a content distributor in communication with the host and the manager, the content distributor [for] providing [content] notification of changes to a master source file set to the host and for receiving a response indicating that the identified changes are installed.

20. (Amended) The system of claim 19, further comprising a traffic manager in communication with the manager, the traffic manager [for] directing web page requests to the web server.

21. (Amended) The system of claim 19, wherein the content distributor comprises:

(a) an identification module for identifying changes in [a] the master source file set;

- (b) a modification list for storing identified changes to the master source file set; [and]
- (c) a transmitter for transmitting the modification list to [an] the agent, the agent having access to a destination file system; and
- (d) a receiver for receiving a response indicating that the destination file system received the identified changes.

22. (Amended) The system of claim 21, further comprising a transmitter for transmitting [the changed files] a copy of a changed file of the master source file set to the agent.

23. (Amended) The system of claim 21, wherein the agent comprises an installer for install[ed]ing [the changed files] a copy of a changed file of the master source file set on the destination file system.

24. (Amended) A content distributor in communication with a computer, comprising:

- (a) an identification module for identifying changes in a master source file set;
- (b) a modification list for storing identified changes to the master source file set; [and]
- (c) a transmitter for transmitting the modification list to an agent in communication with the computer, the agent having access to a destination file system[.]; and
- (d) a receiver for receiving a response from the computer indicating that the destination file system received the identified changes.

25. (Amended) The content distributor of claim 24, [further comprising a] wherein the transmitter is also for transmitting [the changed files] a copy of a changed file of a master source file set to the agent for installation on the destination file system.